Lab 4

Determination the Concentration of Hydrochloric Acid

- **Principle :-**

HCl +NaOH $\longrightarrow$ **NaCl +** H_2O

❖ Procedure :-

1. Fill up the burette with standard NaOH (0.1N)
2. Tale 10ml of unknown HCl solution and transfer it to clean conical flask
3. Add 2-3 drops of Methyl Orange (M.O) indicator
4. Titrate against standard NaOH until end point at which color of Methyl Orange indicator change from Red color to yellow color
5. Report the titration three times and take the average .

$V_{Initial}$	V_{Final}	Consumed Volume

- **Calculation**

$N_1 * V_1 = N_2 V_2$

(Analyte) (titrant)

? * 10ml =0.1*V

$N_1 = \frac{0.1 * v}{10}$ **=** .....

Strengh = N_1***eq.wt (HCl) =.....g/L**